ITEM (E.1) SPECIFIED ROAD RECONSTRUCTION

1. DESCRIPTION OF WORK

This item includes pre-haul reconstruction activities on Forest Service Road 17 (West Cowpen) associated with the timber removal component of this SPA contained in Appendix F.

(a)Scope of Work

The Partner shall provide all tools, equipment, supplies, labor and transportation required to conduct the reconstruction of Forest Service Road 17 in accordance with the specifications described below.

(b)Location and Description

Roads to be reconstructed are located within the boundaries of:

National Forest: Chattahoochee
District: Conasauga
County: Murray
State: Georgia

See Appendix C: Service Project Area Map for location of project site.

Appendix E.1 Road Reconstruction Table

Name and Date of Governing Road Specifications: ***Federal Highway Administration Standard Specifications for Construction of Roads & Bridges on Federal Highway Projects, as amended and supplemented (English).***

Project		Design Class	Approx. Length *(mi./km.)*	Sheet Numbers and Approval Date	Performance Responsibility		
Road No.	Name				Survey	Design	Const. Staking
FS 17	West Cowpen	C	7.0 mi	1-30 5/19/2014	FS	FS	FS

Specified Roads. Specified Roads are roads, including related transportation facilities and appurtenances, shown on the Service Project Area and Timber Removal Area Maps and listed in Table E.1 above. Partner shall re-construct Specified Roads in this Agreement. Construction initiated by Partner on any such Specified Road shall be completed to an agreed terminus that meets Partner's needs and prevents unnecessary impact on National Forest resources. Construction to such terminus shall be in full accordance with Plans and specifications and the Scehdule of Items attached hereto, except for agreed adjustments needed to accommodate such terminus. "Plans" are documents that show location, details, and dimensions of the work to be performed. The "Schedule of Items" is a list and description of construction items, quantities, units of measure, methods of measurement, unit price, and total amount. Forest Service shall

revise the Schedule of Items to show the estimated cost for the portion constructed to the revised terminus as a separate segment.

In event of agreed substitution or revision of construction design, specifications, or performance repsonsibility under E.1 - Contstruction Staking, E.1 - Construction Cost Adjustment, E.1 - Alternate Facilities, E.1 shall be modified.

If Partner does not need a Specified Road or a portion of a Specified Road for harvesting included timber and the Specified Road is not constructed, the deletion of the road or road segment will be a mutually agreed Design Change and Timber Sale Account will be adjusted for the reduction in cost.

References in the agreement to specifications, standards, or test methods adopted by the American Association of State Highway and Transportation Officials (AASHTO), American Society for Testing and Materials (ASTM), General Services Administration (GSA), or other recognized national technical associations shall mean specifications, standards, or test methods, including interim or tentative issues, that are in effect on the date of signed agreement.

Road Completion Date. Construction of Specified Roads shall be completed no later than **June 30, 2016.** When Partner desires to construct an alternate facility, Partner and Forest Service shall agree, in writing, on a construction completion date for alternate facility. Completion date shall be adjusted where a Design Change or physical changes necessitate a modification of Specified Road construction work that increases the scope or magnitude of the required work.

As used in this section, construction of a road is complete when:

> Partner constructs Specified Roads and Forest Service furnishes Partner with written notice of acceptance under Appendix E.1.3 – Acceptance of Work.

Construction Staking. Partner shall avoid careless or negligent damage to construction stakes, flags, or marks. If such damage occurs, Partner shall be required to replace stakes necessary to construction. Partner's replacement staking shall be approved by Forest Service. When construction stakes are to be set by Forest Service after clearing, Partner shall submit to Forest Service a written schedule for clearing, construction staking, and construction that will provide Forest Service a reasobale period for seeting stakes. Time for setting construction stakes may be modified by written agreement.

If Forest Service performs construction staking for Specified Roads, timing of such staking shall permit Partner's clearing and other construction activity to proceed without hindrance or delay, provided Partner's construction activity is reasonably consistent with needs identified in Partner's Operating Schedule or amendments thereto.

Should Forest Service be unable to perform construction staking in such reasonable period, upon written agreement, Partner shall assume the responsibility for construction staking for agreed upon portions of Specified Roads. In such event, Contracting Officer shall revise:

(a)Appendix E.1 Reconstruction Table to show Partner's responibility;

(b)The Schedule of Items to include costs of construction staking, as provided under E.1 - Estimated Cost, adjust Timber Sale Account, as provided in E.1 - Construction Cost Adjustment. Forest Service shall calculate costs, using unit rates comparable with those used in the Schedule of Items.

Use of Partially Constructed Roads. Unless agreed otherwise, specified reconstruction shall be completed on any portion of road prior to hauling on that portion.

Estimated Cost. Estimated costs by construction phases for Specified Roads listed in E.1 are stated by segments in the Schedule of Items. Such estimated costs are subject to adjustment under E.1 - Specified Roads, E.1 – Construction Staking, E.1 – Construction Cost Adjustment, and E.1 - Alternate Facilities. Appropriately adjusted costs shall be made part of a revised Schedule of Items and shown as adjsutments to Timber Sale Account. The revised Schedule of Items shall supercede any prior Schedule of Items when it is dated and signed by Contracting Officer and a copy is furnished to Partner.

Construction Cost Adjustment. Contracting Officer, as provided in E.1 – Construction Staking, E.1 - Variation in Quantities, E.1 – Physical Change, and E.1 – Design Change, shall adjust Specified Road construction cost estimates in the Schedule of Items and show the adjustment as credits or debits to Timber Sale Account in the month when the road segment is accepted.

Variation in Quantities. This Item applies only to differences between quantities shown in the Schedule of Items and measured quantities actually constructed and accepted that are not covered under E.1 – Physical Change and E.1 – Design Change. Only changes in quantities where other than agreement quantity or lump sum is specified in the Schedule of Items are subject to this Item.

Adjustments to the Specified Road construction cost for variation in quantities shall be computed at unit rates established in the Schedule of Items for units of work actually constructed and measured in accordance with specified method of measurement shown in the Schedule of Items and described in the Specifications identified in E.1, except that:

When quantity of authorized work performed or material furnished by Partner, under any tem shown in the Schedule of Items and covered by this Item, is more than 115 percent of riginal quantity, use Current Unit Rates to calculate the adjsutment for that protion of work above 115 percent of original quantity.

When quantity of authorized work performed or material furnished by Partner, under any item shown in the Schedule of Items and covered by this Item, is less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost for such work. Any revised estimate shall use the same procedures as those used in original estimates using rates comparable to those used in computing the most recent cost estimate for the timber sale. The revised cost estimate shall take into account any increase or decrease in

unit rates that results from a reduction in quantity of work.

"Current Unit Rate" are Forest Service estimates of the unit rates for doing the work at the time the adjustment is approved.

Physical Change. Forest Service shall adjsut the Specified Road construction cost if, prior to acceptance under E.1.3 – Acceptance of Work, a physical change, caused by a single event and not due to negligence of Partner, results in an increase or decrease in work and/or materials furnished by Partner involving additional estimated cost of:

More than $10,000 or
More than 10 percent of total Specified Road construction cost, whichever is less.

Increases to the Specified Road construction cost shall include cumulative estimated costs of repairing damage from things such as slides, washouts, landslips, and fire. Plans and specifications shall be revised when necessary to meet new conditions. Quantities of work and/or materials determined from such revised Plans and specifications, together with estimated quantities of work and/or materials abandoned, shall be the basis for the revised Specified Road construction cost.

Forest shall determine difference in quantities for portions of Specified Road affected by physical change by comparing most recent previous quantities with total of:

Estimated quantities actually constructed prior to physical change, including work abandoned, and

Estimated quantities to be constructed following physical change.

Forest Service shall calculate the amount of increase to the Specified Road construction cost by applying:

CurrentUnit Rates to differences when quantities increase and

Unit rates comparable to those used in computing most recent cost estimate for the timber sale when quantities decrease.

When quantity of authorized work to be performed or material furnished by Partner, under any item shown in the Schedule of Items, is reduced to less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost for such work and adjust the Specified Road construction cost. Any revised estimate shall use the same procedures as those used in the original estimates using rates comparable to those used in the most recent cost estimate for the timber sale. The revised estimate shall take into account for any increase or decrease in unit rates that results from a reduction in quantity of work.

Design Change. "Design Change" is a change in work and/or materials shown in the Schedule of Items and described in Plans or specifications that has been mutually agreed to in writing or

ordered by Contracting Officer. Changes of a minor nature (such as adjustment in horizontal and vertical alignment, that do not exceed specified tolerance, necessary to maintain or balance earthwork quantities substantially as designed) and variation in quantities, as described in F10a – Variation in Quantities, shall not be considered Design Changes.

Additions, deletions, or changes in types or diameter of culverts shown in Plans and changes in designated water sources shown on Plans shall be considered Design Changes.

Forest Service may, by written notice from Contracting Officer, order changes in work to be performed and/or materials furnished by Partner within general scope of the agreement. Such work shall:

Be due to differences between anticipated and actual field conditions,

Be necessary to construct Specified Roads to design standards, or

Be necessary to assure stability of Specied Roads,

In addition, Contracting Officer may include work to protect resource values in ordered Design Changes. Such work must be related to construction of Specified Roads and be necessary to prevent damage to soil and water values immediately tributary to Specified Roads. Other Design Changes may be made by mutual written agreement.

Forest Service shall revise Plans and specifications as necessary to meet new conditions. Quantities of work and/or materials determined from such revised Plans and specifications, together with quantities of work and/or materials abandoned, shall be the basis for adjusting the Specified Road construction cost.

Forest Service shall determine the difference in quantities for the portion of Specified Road affected by Design Change by comparing the most recent previous quantities with the total of:

Estimated quantities actually constructed prior to Design Change and

Estimated quantities to be constructed following Design Change.

Calculate the amount of adjsutment to the Specified Road construction cost by applying:

Current Unit Rates to difference when quantities increase and

Unit rates comparable to those used in computing most recent cost estimates of the timber sale when quantities decrease.

When quantity of authorized work to be performed or material furnished by Partner, under any item shown in the Schedule of Items, is reduced to less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost of such work and adjust the Specified Road construction cost. Any revised estimate shall use the same procedures as those used in original estimates using rates comparable to those used in the most recent cost estimate for the timber

sale. The revised estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

Alternate Facilities. If under Partner's operating schedule, roads needed for timber removal differ substantially from Specified Roads, other roads may be added to E.1. Contracting Officer shall assure that road routing, location, design, and needed easements will make such other roads acceptable as parts of the National Forest transportation facilities. Purchaser shall provide survey, design, and construction staking for such other roads.

Based on design quantities from such engineering, Forest Service shall estimate Specified Road construction costs if alternate facilities, using methods consistent with those used in the original computation of the Schedule of Items. If Specified Road construction costs for acceptable alternate facilities are less than the estimated costs of facilities listed in the original Schedule of Items that Partner does not construct, Timber Sale Account shall be adjsuted by Forest Service to reflect the reduction in costs.

2. TECHNICAL SPECIFICATIONS
SEE BELOW

CHATTAHOOCHEE-OCONEE NATIONAL FORESTS
CONASAUGA RANGER DISTRICT

FS-17 WEST COWPEN ROAD RECONSTRUCTION

LEVEL OF SERVICE C
INDEX

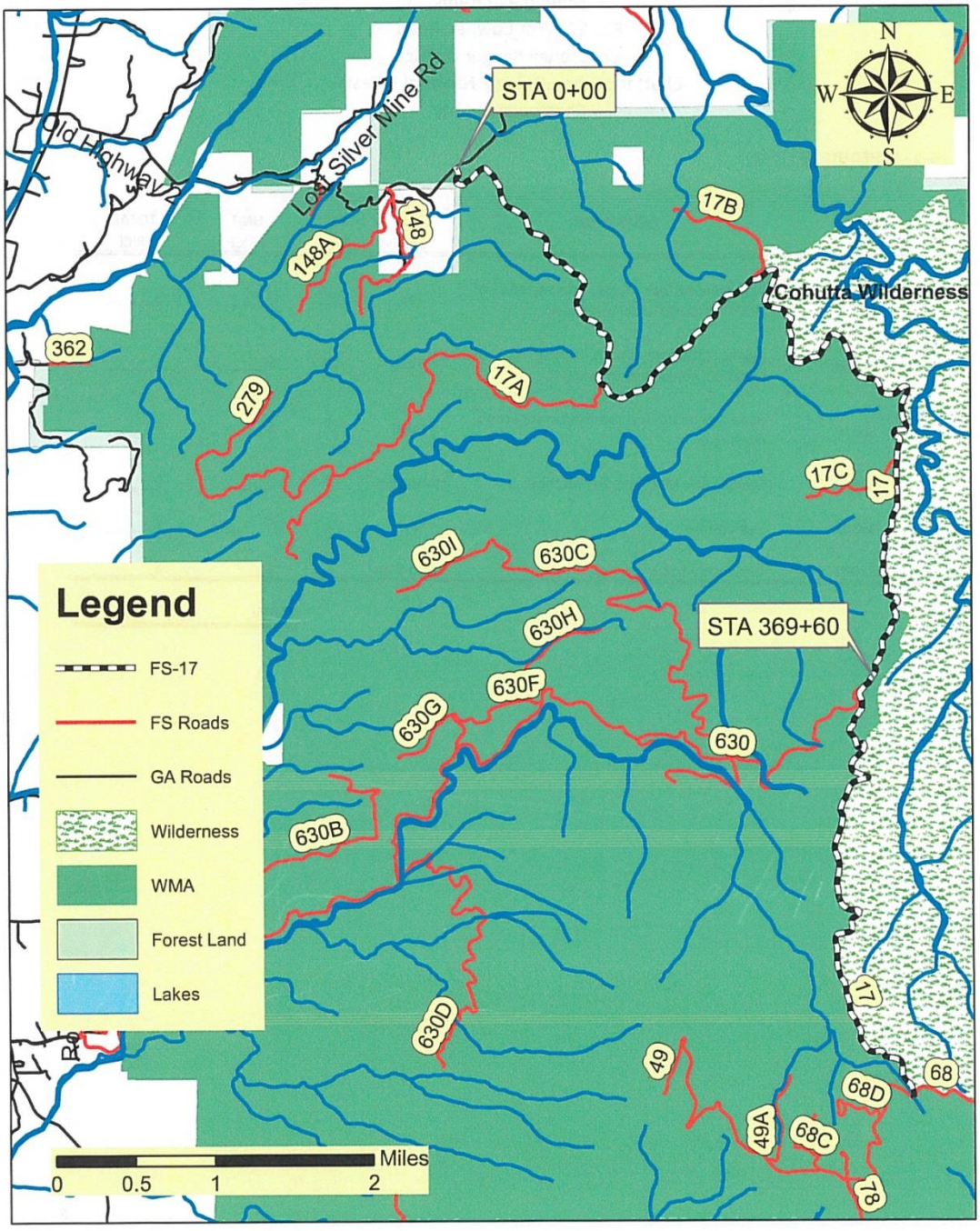
D.W. Boyd — 1 May 2014
ROADS ENGINEER — DATE

05/01/14
R.E.A.L. STAFF OFFICER — DATE

ACTING
5/13/14
DISTRICT RANGER — DATE

5/19/14
FOREST SUPERVISOR — DATE

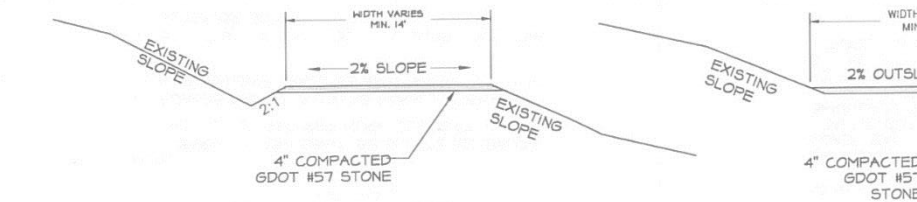
FS-17 West Cowpen Road
Location Map

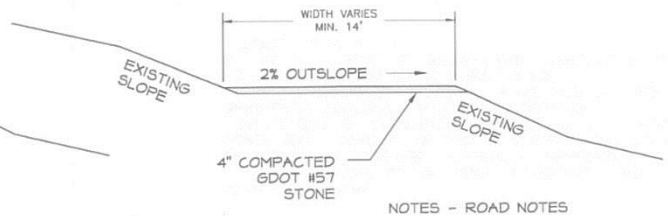


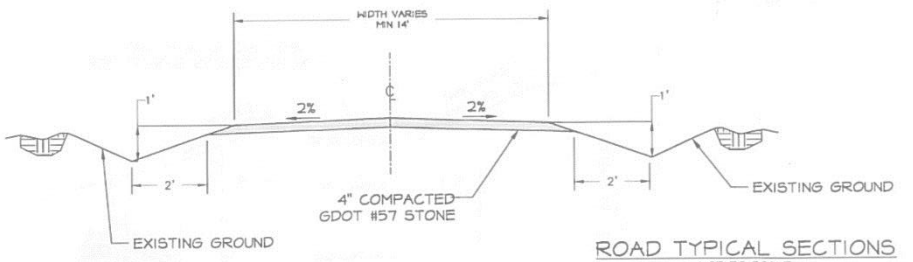
Schedule of Items
F.S. 17 West Cowpen Road
Conasauga Ranger District
Chattahoochee-Oconee National Forests
Chattooga County

B- 1 - SCHEDULE OF ITEMS

ITEM NO.	DESCRIPTION	PAY UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
30115A	Aggregate surface course, compacted 2" of GDOT #4, compaction method A	Ton	1052	$_____	$_____
30115b	Aggregate surface course, compacted 2" of GDOT #3, compaction method A	Ton	18	$_____	$_____
30318	Road reconditioning, roadbed, compaction method D	Mile	7	$_____	$_____
62530	Seeding and Mulching, Dry Method	Lump Sum	1	$_____	$_____
63301	Sign system	Each	2	$_____	$_____
63501	Temporary traffic control	Lump Sum	1	$_____	$_____
				TOTAL	$0





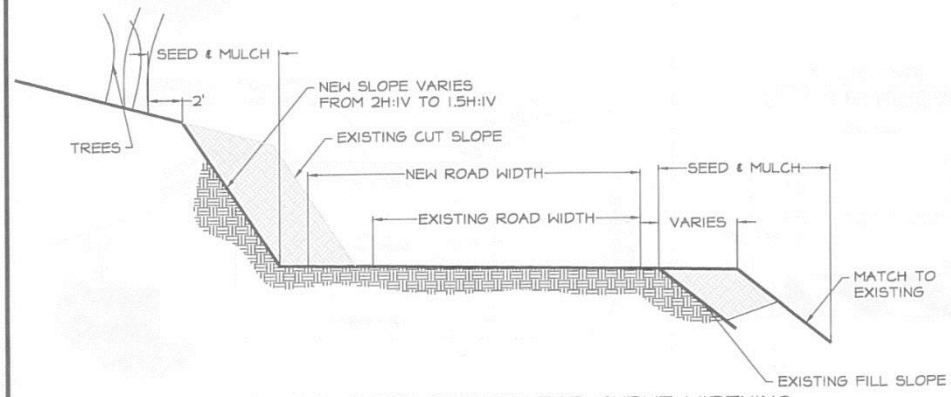


ROAD TYPICAL SECTIONS

NOT TO SCALE

NOTES - ROAD NOTES

1. ROAD WIDTH AT ROAD SHALL BE 14' MINIMUM.
2. MAXIMUM CUT SLOPES SHALL BE ¾:1 AND MAXIMUM FILL SLOPES 1½:1
3. ROAD RECONDITIONING WORK INCLUDE GRADE AND RESHAPE EXISTING ROADBED (INCLUDING DITCH, CULVERTS INLET/OUTLET AS NEEDED) AND CURVE WIDENING PER DRAWINGS AND SPECIFICATIONS. PAY ITEM 30318.
4. ROAD BLADING SHALL BE DONE WITH MOTORGRADER.
5. CLEARING AND GRUBBING INCLUDES REMOVAL OF TREES, STUMPS AND BRANCHES FROM CLEARING LIMITS. PAY ITEM 20101.
6. SEED, FERTILIZED AND MULCH ALL DISTURBED AREAS PER DRAWINGS AND SPECIFICATIONS WITHIN 14 DAYS OF DISTURBANCE FINALIZE. PAY ITEM 62530.



TYPICAL ROAD SECTION FOR CURVE WIDENING

NOT TO SCALE

NOTES:

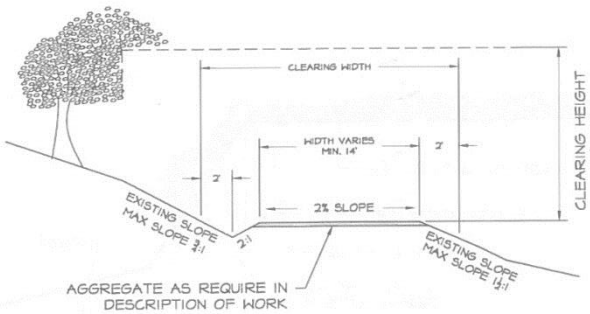
1. EXACT LOCATION OF WORK WILL BE STAKED BY FOREST SERVICE PERSONNEL.
2. SEE DESCRIPTION OF WORK FOR NEW ROAD WIDTH.
3. INSTALL GADOT #4 STONE PER DESCRIPTION OF WORK.
4. CUT SLOPE MATERIAL WILL BE INSTALL AND COMPACTED AT FILL SIDE SLOPE PER WORK DESCRIPTION.
5. NEW FILL SIDE SLOPE SHOULD MATCH EXISTING FILL SLOPE.
6. SEED, FERTILIZED AND MULCH ALL DISTURBED AREAS PER DRAWINGS AND SPECIFICATIONS WITHIN 14 DAYS OF DISTURBANCE FINALIZE. PAY ITEM 62530.
7. ALL WORK SHALL BE APPROVED BY FOREST SERVICE PERSONNEL.

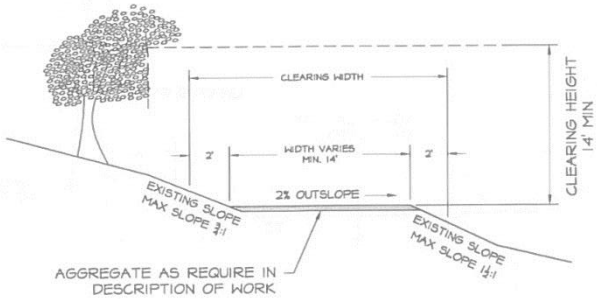
U.S. FOREST SERVICE
SOUTHERN REGION

FS-17 WEST COWPEN ROAD RECONSTRUCTION
CONASAUGA RANGER DISTRICT
CHATTAHOOCHEE-OCONEE NATIONAL FOREST

PROJECT NO:
DWG FILE NAME:
DRAWN BY: S. WATTS
CHECKED BY:

SHEET TITLE:
Title Sheet:
Roads Typical Sections



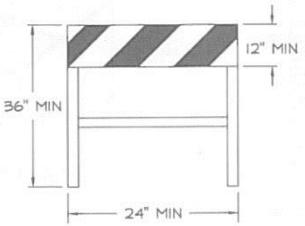


CLEARING LIMITS DETAILS

NOT TO SCALE

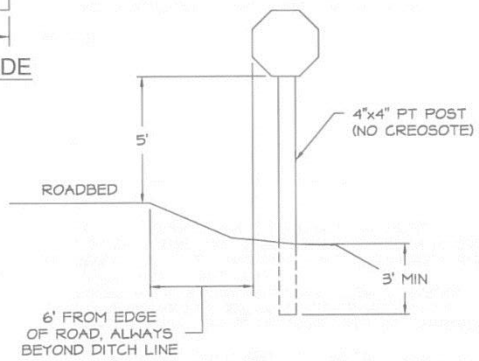
NOTE

1. CLEARING SLASH SHALL BE SCATTERED BELOW THE FILL SLOPES PER WORK DESCRIPTION.
2. ROADBED RECONDITIONING WORK, MATERIALS AND WORKMANSHIP SHALL BE PAID UNDER PAY ITEM 30318.
3. GADOT STONE SHALL BE PAID UNDER PAY ITEM 30115A OR 30115B.



TYPE 1 BARRICADE

NOT TO SCALE



SIGN STANDARD MOUNTING

NOT TO SCALE

NOTE - SIGN PLAN

1. INSTALL "ROAD CLOSED" SIGN W20-3 AND TYPE 1 BARRICADE (MINIMUM REQUIREMENT) AT BEGINNING/END OF ROADS EACH ROAD AS NEEDED TO CLOSED ROAD TO ANY TRAFFIC DURING CONSTRUCTION. SEE MUTCD PAGE 605 FOR BARRICADE RECOMMENDATIONS AND DETAILS.
2. ALL MATERIALS, INSTALLATION AND WORKMANSHIP SHALL BE PAID UNDER PAY ITEMS 63301 OR 63501.
3. ALL DEVICES SHALL BE NEW AND APPROVED BY COR BEFORE INSTALLATION.

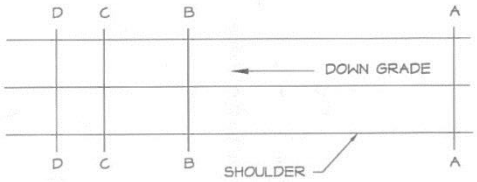
U.S. FOREST SERVICE
SOUTHERN REGION

FS-17 WEST COWPEN ROAD RECONSTRUCTION
CONASAUGA RANGER DISTRICT
CHATTAHOOCHEE-OCONEE NATIONAL FOREST

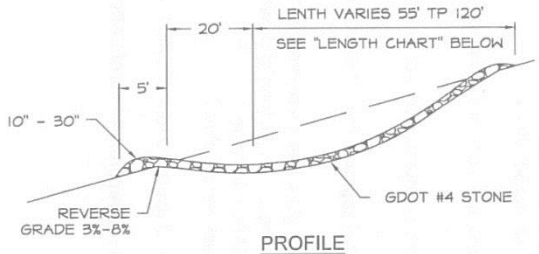
PROJECT NO:
CAD FILE NAME:
DRAWN BY: S. WATTS
CHECKED BY:

Sheet Title
Title Sheet/
Clearing Limits
Sign Details

5-30



PLAN



PROFILE

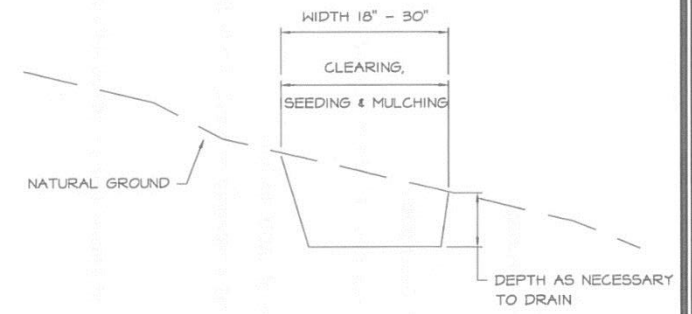
DIP DETAILS

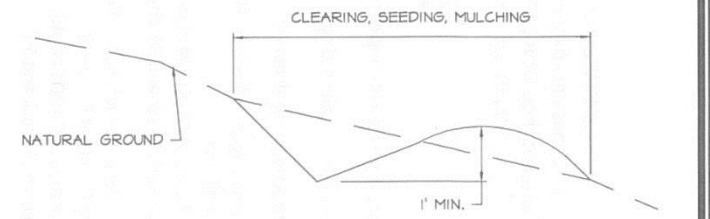
NOT TO SCALE

LEGEND
A - BEGIN DIP
B - LOWEST POINT IN DIP
C - CREST
D - END OF DIP

LENGTH CHART	
DESIGN GRADE	LENGTH
10%	120'
9%	80'
8% OR LESS	55'

NOTE:
1. LOCATION OF DIPS SHALL BE AS STAKED IN THE DESCRIPTION OF WORK OR ON THE FIELD BY THE COR.
2. ALL MATERIALS, INSTALLATION AND WORKMANSHIP FOR DIP RECONSTRUCTION SHALL BE PAID UNDER PAY ITEM 30318.
3. GADOT STONE SHALL BE PAID UNDER PAY ITEM 30115A OR 30115B.





LEADOFF DITCH DETAILS

NOT TO SCALE

NOTES:
1. LOCATION OF LEADOFF DITCH SHALL BE AS STAKED IN THE DESCRIPTION OF WORK OR ON THE FIELD BY THE COR.
2. DITCH SHALL SLOPE TO DRAIN.
3. ALL MATERIALS, INSTALLATION AND WORKMANSHIP FOR LEADOFF DITCH RECONSTRUCTION SHALL BE PAID UNDER PAY ITEMS 30318.
4. GADOT STONE SHALL BE PAID UNDER PAY ITEM 30115A OR 30115B.

U.S. FOREST SERVICE
SOUTHERN REGION

FS-17 WEST COWPEN ROAD RECONSTRUCTION
CONASAUGA RANGER DISTRICT
CHATTAHOOCHEE-OCONEE NATIONAL FOREST

PROJECT NO:
CAD FILE NAME:
DRAWN BY: S. WATTS
CHECKED BY:

Sheet Title
Title Sheet
Dip Details
Leadoff Ditch Details

6-30

F.S.17 West Cowpen
Conasauga Ranger District
Chattahoochee-Oconee National Forests
Chattooga County

Station	Work Description
0+00	Begin project. Begin blading @ intersection with FS 17 and Old GA-2.
0+53	Remove berm. Install road signs.
1+05	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
5+28	Curve widening on left 6 feet. Place extra material over road bed at fill side. Place brush at fill side. Place 18 tons of GADOT #4 stone. Taper curve 50' back and 50' ahead.
7+92	Curve widening on left 6 feet. Place extra material over road bed at fill side. Place brush at fill side at STA 5+28. Place 18 tons of GADOT #4 stone. Taper curve 50' back and 50' ahead.
8+44	Construct dip (install approx. 9 tons of GADOT #4 stone)
10+56	Curve widening on left 6 feet. Place extra material over road bed at fill side. Place brush at fill side. Seed area. Place 18 tons of GADOT #4 stone. Taper curve 50' back and 50' ahead.
11+61	Construct dip (install approx. 9 tons of GADOT #4 stone)
12+14	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
15+84	Construct dip (install approx. 9 tons of GADOT #4 stone)
26+40 to 27+45	Curve widening on right 4 feet. Place extra material over road bed at fill side. Construct ditch at toe of cut side (on right). Seed area. Place 36 tons of GADOT #4 stone. Taper curve 50' back and 50' ahead.
47+52	Construct dip (install approx. 9 tons of GADOT #4 stone)
52+80	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)

Station	Work Description
73+92	Reconstruct road to remove mud hole. Install 18 tons of GADOT #3 stone and 9 tons of GADOT #4 stone over GADOT #3. Seed area.
79+20	Construct dip with lead off ditch on left (install approx. 9 tons of GADOT #4 stone). Seed area.
84+48	Entrance to Jones Cabin
100+32	Construct dip (install approx. 9 tons of GADOT #4 stone)
105+60	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
116+16	Intersection with FS-17A
126+72	Reconstruct dip with lead off ditch (install approx. 9 tons of GADOT #4 stone). Seed area.
127+77	Reconstruct dip with lead off ditch (install approx. 9 tons of GADOT #4 stone). Seed area.
132+00	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
147+84	Construct dip (install approx. 9 tons of GADOT #4 stone)
158+40	Wildlife opening on right
159+45	Construct dip (install approx. 9 tons of GADOT #4 stone)
163+68	Reconstruct dip with lead off ditch (install approx. 9 tons of GADOT #4 stone). Seed area.
168+96	Construct dip (install approx. 9 tons of GADOT #4 stone)
174+24 to 174+77	Curve widening on right 4 feet. Place extra material over road bed at fill side. Construct ditch at toe of cut side (on right). Seed area. Place 36 tons of GADOT #4 stone.
182+16	Construct dip with lead off ditch on left (install approx. 9 tons of GADOT #4 stone). Seed area.
185+32	Curve widening on right 3 feet. Place extra material over road bed at fill side. Construct ditch at toe of cut side. Seed area. Place 36 tons of GADOT #4 stone. Taper curve 75' back and 75' ahead.
190+08	Intersection with FS-17B
195+36	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
196+41	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)

Station	Work Description
200+64	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
203+28	Curve widening on right 6 feet. Place extra material over road bed at fill side. Scatter brush at fill side. Seed area. Place 36 tons of GADOT #4 stone. Taper curve 40' back and 40' ahead.
211+20	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
213+84	Reconstruct dip with lead off ditch (install approx. 9 tons of GADOT #4 stone). Seed area.
232+32	Curve widening on right 8 feet. Place extra material over road bed 70 feet ahead to raise grade. Seed area. Place 36 tons of GADOT #4 stone. Taper curve 30' back and 30' ahead.
237+60	Construct dip with lead off ditch (install approx. 9 tons of GADOT #4 stone). Seed area.
238+65	Construct dip with lead off ditch (install approx. 9 tons of GADOT #4 stone). Seed area.
248+16	Curve widening on right 6 feet. Place extra material over road bed. Seed area. Place 36 tons of GADOT #4 stone. Taper curve 35' back and 35' ahead.
249+21	Intersection with gated road.
250+80	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
253+44	Curve widening on right 4 feet. Place extra material over road bed. Seed area. Place 18 tons of GADOT #4 stone. Taper curve 25' back and 25' ahead.
255+02	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
257+66	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
264+00	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
278+78	Construct dip (install approx. 9 tons of GADOT #4 stone)
295+68	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
298+32	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
322+08	Construct dip (install approx. 9 tons of GADOT #4 stone)
324+72	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
327+36	Curve widening on left 4 feet. Place extra material over road bed at fill side. Scatter brush at fill side. Seed area. Place 18 tons of GADOT #4 stone. Taper curve 50' back and 50' ahead.

Station	Work Description
328+41	Curve widening on left 4 feet. Place extra material over road bed at fill side. Scatter brush at fill side. Seed area. Place 18 tons of GADOT #4 stone. Taper curve 50' back and 50' ahead.
328+94	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
337+92	Intersection with Cherry Gap Road
338+97	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
340+56	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
343+20	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
394+32	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
365+37	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
366+96	Reconstruct dip (install approx. 9 tons of GADOT #4 stone)
369+60	End of road blading. End of reconstruction.

Specifications Table of Contents

Preface

Preface_wo_03_15_2004_m

Delete all but the first paragraph and add the following:

The Forest Service, US Department of Agriculture has adopted FP-03 for construction of National Forest System Roads.

101 - Terms, Format, and Definitions

101.00_nat_us_07_25_2005

101.01_nat_us_01_22_2009

101.01 Meaning of Terms

Delete all references to the TAR (Transportation Acquisition Regulations) in the specifications.

101.01_nat_us_01_22_2009

101.01 Meaning of Terms

Delete all references to the FAR (Federal Acquisition Regulations) in the specifications.

101.03_nat_us_06_16_2006

101.03 Abbreviations.

Add the following to (a) Acronyms:

AFPA	American Forest and Paper Association
MSHA	Mine Safety and Health Administration
NIST	National Institute of Standards and Technology
NESC	National Electrical Safety Code
WCLIB	West Coast Lumber Inspection Bureau

Add the following to (b) SI symbols:

mp	Milepost
ppm	Part Per Million

101.04_nat_us_03_29_2007

101.04 Definitions.

Delete the following definitions and substitute the following:

Bid Schedule--The Schedule of Items.

Bridge--No definition.

Contractor--The individual or legal entity contracting with the Government for performance of prescribed work. In a timber sale contract, the contractor is the "purchaser".

Culvert--No definition.

Right-of-Way--A general term denoting (1) the privilege to pass over land in some particular line (including easement, lease, permit, or license to occupy, use, or traverse public or private lands), or (2) Real property necessary for the project, including roadway, buffer areas, access, and drainage areas.

Add the following:

Adjustment in Contract Price--"Equitable adjustment," as used in the Federal Acquisition Regulations, or "construction cost adjustment," as used in the Timber Sale Contract, as applicable.

Change--"Change" means "change order" as used in the Federal Acquisition Regulations, or "design change" as used in the Timber Sale Contract.

Design Quantity--"Design quantity" is a Forest Service method of measurement from the FS-96 *Forest Service Specifications for the Construction of Roads and Bridges.* Under these FP specifications this term is replaced by the term "Contract Quantities".

Forest Service--The United States of America, acting through the Forest Service, U.S. Department of Agriculture.

Neat Line--A line defining the proposed or specified limits of an excavation or structure.

Pioneer Road--Temporary construction access built along the route of the project.

Purchaser--The individual, partnership, joint venture, or corporation contracting with the Government under the terms of a Timber Sale Contract and acting independently or through agents, employees, or subcontractors.

Protected Streamcourse--A drainage shown on the plans or timber sale area map that requires designated mitigation measures.

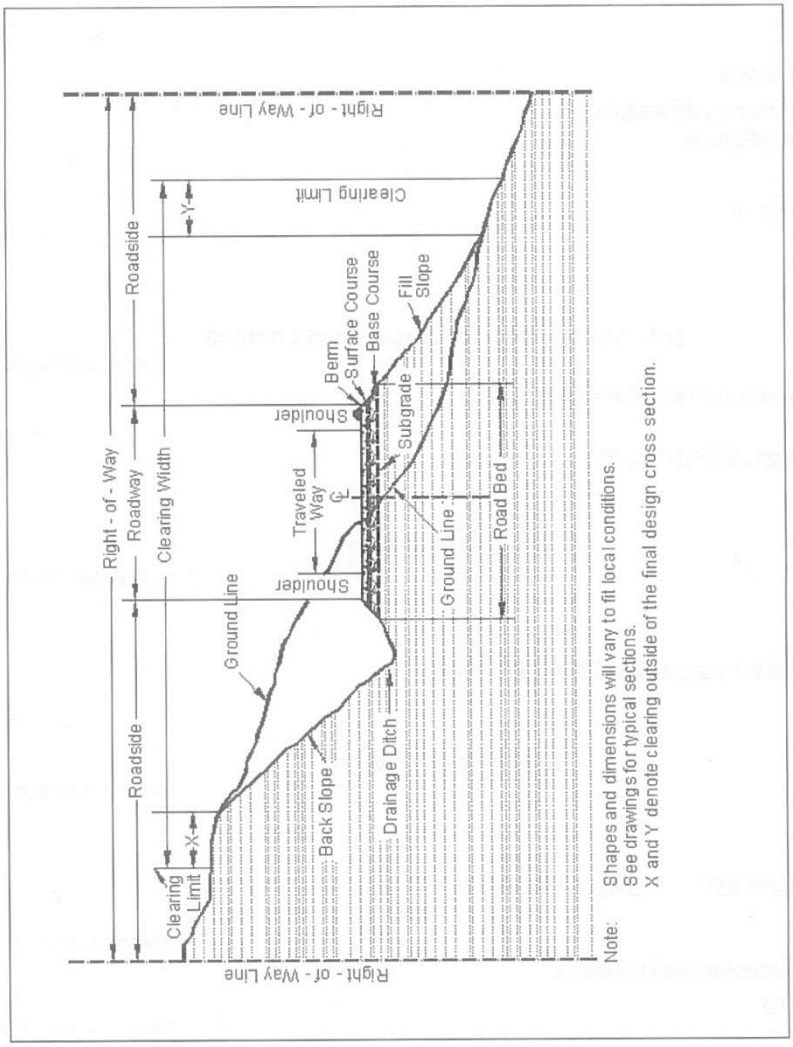
Road Order--An order affecting and controlling traffic on roads under Forest Service jurisdiction. Road Orders are issued by a designated Forest Officer under the authorities of 36 CFR, part 260.

Schedule of Items--A schedule in the contract that contains a listing and description of construction items, quantities, units of measure, unit price, and amount.

Utilization Standards--The minimum size and percent soundness of trees described in the specifications to determine merchantable timber.

Add Figure 101-1—Illustration of road structure terms:

Figure 101-1—Illustration of road structure terms.



101.04_nat_us_11_06_2007

101.04 Definitions.

Delete the following definitions:

Contract Modification

Day

Notice to Proceed

Solicitation

102 - Bid, Award, and Execution of Contract

102.00_nat_us_02_16_2005

102 Bid, Award, and Execution of Contract

Delete Section 102 in its entirety.

103 - Scope of Work

103.00_nat_us_02_16_2005

Deletions

Delete all but subsection 103.01 Intent of Contract.

104 - Control of Work

104.00_nat_us_06_16_2006

Deletions

Delete Sections 104.01, 104.02, and 104.04.

104.03_nat_us_01_22_2009

104.03 Specifications and Drawings.

Delete 104.03.

104.06_nat_us_02_17_2005

Add the following subsection:

104.06 Use of Roads by Contractor

The Contractor is authorized to use roads under the jurisdiction of the Forest Service for all activities necessary to complete this contract, subject to the limitations and authorizations

designated in the Road Order(s) or described in the contract, when such use will not damage the roads or national forest resources, and when traffic can be accommodated safely.

105 - Control of Material

105.02_nat_us_01_18_2007

105.02 Material Sources.

105.02(a) Government-provided sources.

Add the following:

Comply with the requirements of 30 CFR 56, subparts B and H. Use all suitable material for aggregate regardless of size unless otherwise designated. When required, re-establish vegetation in disturbed areas according to section 625.

105.05_nat_us_05_12_2004

105.05 Use of Material Found in the Work.

Delete 105.05 (a) and (b) and the last sentence of the second paragraph and substitute the following:

Materials produced or processed from Government lands in excess of the quantities required for performance of this contract are the property of the Government. The Government is not obligated to make reimbursement for the cost of producing these materials.

106 - Acceptance of Work

106.01_nat_us_07_31_2007

106.01 Conformity with Contract Requirements.

Delete Subsection 106.01 and substitute the following:

References to standard test methods of AASHTO, ASTM, GSA, and other recognized standard authorities refer to the methods in effect on the date of solicitation for bids.

Perform all work to the lines, grades, cross-sections, dimensions, and processes or material requirements shown on the plans or specified in the contract.

Incorporate manufactured materials into the work according to the manufacturer's recommendations or to these specifications, whichever is more strict.

Plan dimensions and contract specification values are the values to be strived for and complied with as the design values from which any deviations are allowed. Perform work and provide material that is uniform in character and reasonably close to the prescribed value or within the specified tolerance range. The purpose of a tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons.

When standard manufactured items are specified (such as fence, wire, plates, rolled shapes, pipe conduits, etc., that are identified by gauge, unit mass, section dimensions, etc.), the identification

will be considered to be nominal masses or dimensions. Unless specific contract tolerances are noted, established manufacturing tolerances will be accepted.

The Government may inspect, sample, or test all work at any time before final acceptance of the project. When the Government tests work, copies of test reports are furnished to the Contractor upon request. Government tests may or may not be performed at the work site. If Contractor testing and inspection is verified by the Government, the Contractor's results may be used by the Government to evaluate work for acceptance. Do not rely on the availability of Government test results for process control.

Acceptable work conforming to the contract will be paid for at the contract unit bid price. Four methods of determining conformity and accepting work are described in Subsections 106.02 to 106.05 inclusive. The primary method of acceptance is specified in each Section of work. However, work may be rejected at any time it is found by any of the methods not to comply with the contract.

Remove and replace work that does not conform to the contract, or to prevailing industry standards where no specific contract requirements are noted, at no cost to the Government.

(a) Disputing Government test results. **If the accuracy of Government test results is disputed, promptly inform the CO. If the dispute is unresolved after reasonable steps are taken to resolve the dispute, further evaluation may be obtained by written request. Include a narrative describing the dispute and a proposed resolution protocol that addresses the following:**

(1) Sampling method;
(2) Number of samples;
(3) Sample transport;
(4) Test procedures;
(5) Testing laboratories;
(6) Reporting;
(7) Estimated time and costs; and
(8) Validation process.

If the evaluation requires additional sampling or testing be performed, mutually agree with the Government on witnessing procedures and on sampling and testing by a third party laboratory. Use a third party laboratory accredited by the AASHTO accreditation program. Provide proof of the laboratory's accreditation for the test procedures to be used. Do not use the same laboratory that produced the disputed Government test results or that produced the test results used as a basis for the dispute.

The CO will review the proposed resolution protocol and may modify it before final approval and execution.

The Government will use the approved resolution protocol test results to determine the validity of the disputed testing. If the Government test results are validated, the Contractor will be responsible for all costs associated with developing and performing the

resolution protocol. If the Government test results are not validated, the Government will be responsible for all costs associated with developing and performing the resolution protocol. If the validity of the Government test results cannot be determined, the Contractor and Government will equally share all costs associated with developing and carrying out the resolution protocol.

(b) Alternatives to removing and replacing non-conforming work. As an alternative to removal and replacement, the Contractor may submit a written request to:

(1) Have the work accepted at a reduced price; or

(2) Be given permission to perform corrective measures to bring the work into conformity.

The request must contain supporting rationale and documentation. Include references or data justifying the proposal based on an evaluation of test results, effect on service life, value of material or work, quality, aesthetics, and other tangible engineering basis. The CO will determine disposition of the nonconforming work.

106.07_nat_us_05_11_2004

106.07 Delete

Delete subsection 106.07.

107 - Legal Relations and Responsibility to the Public

107.05_nat_us_05_11_2004

107.05 Responsibility for Damage Claims.

Delete the entire subsection.

107.06_nat_us_06_16_2006

107.06 Contractor's Responsibility for Work.

Delete the following from the first paragraph.

"except as provided in Subsection 106.07".

107.08_nat_us_03_29_2005

107.08 Sanitation, Health, and Safety

Delete the entire subsection.

107.09_nat_us_06_16_2006

107.09 Legal Relationship of the Parties.

Delete the entire subsection.

107.10_nat_us_06_16_2006

107.10 Environmental Protection.

Add the following:

Design and locate equipment repair shops, stationary refueling sites, or other facilities to minimize the potential and impacts of hazardous material spills on Government land.

Before beginning any work, submit a Hazardous Spill Plan. List actions to be taken in the event of a spill. Incorporate preventive measures to be taken, such as the location of mobile refueling facilities, storage and handling of hazardous materials, and similar information. Immediately notify the CO of all hazardous material spills. Provide a written narrative report form no later than 24 hours after the initial report and include the following:

- Description of the item spilled (including identity, quantity, manifest number, and other identifying information).
- Whether amount spilled is EPA or state reportable, and if so whether it was reported, and to whom.
- Exact time and location of spill including a description of the area involved.
- Containment procedures.
- Summary of any communications the Contractor had with news media, Federal, state and local regulatory agencies and officials, or Forest Service officials.
- Description of clean-up procedures employed or to be employed at the site including final disposition and disposal location of spill residue.

When available provide copies of all spill related clean up and closure documentation and correspondence from regulatory agencies.

The Contractor is solely responsible for all spills or leaks that occur during the performance of this contract. Clean up spills or leaks to the satisfaction of the CO and in a manner that complies with Federal, state, and local laws and regulations.

108 - Prosecution and Progress

108.00_nat_us_02_16_2005

108 Delete.

Delete Section 108 in its entirety.

109 - Measurement and Payment

109.00_nat_us_02_17_2005

109 Deletions

Delete the following entire subsections:

109.06 Pricing of Adjustments.

109.07 Eliminated Work.

109.08 Progress Payments.

109.09 Final Payment.

109.02_nat_us_06_16_2006

109.02 Measurement Terms and Definitions.

(b) Contract quantity.

Add the following:

Contract quantities will be adjusted only when there are errors in the original design of 15% or more.

Change the following:

"(b) Cubic yard" to "(c) Cubic yard".

Add the following definition:

(p) Thousand Board Feet (Mbf). 1,000 board feet based on nominal widths, thickness, and extreme usable length of each piece of lumber or timber actually incorporated in the job. For glued laminated timber, 1,000 board feet based on actual width, thickness, and length of each piece actually incorporated in the job.

155 - Schedules for Construction Contracts

155.00_nat_us_05_11_2004

155 Delete.

Delete Section 155 in its entirety.

201 - Clearing and Grubbing

201.00_nat_us_08_05_2009

201.02 Material:

Delete Tree wound dressing material reference.

201.03 General.

Delete the last sentence.

201.04 Clearing.

Delete the last sentence of (d).

201.01_nat_us_02_18_2005

201.01 Description

Replace with the following

This work consists of clearing and grubbing within clearing limits and other designated areas.

201.04_nat_us_02_18_2005

201.04 Clearing.

Add the following:

When marked in advance, remove dead trees over 6 inches in diameter measured at 12 inches above the ground that lean toward the road and are tall enough to reach the roadbed.

201.04_nat_us_02_22_2005

201.04 Clearing. (c)

Delete paragraph (c) and replace with the following:

(c) In areas outside the excavation, embankment, and slope rounding limits, cut stumps to within 12 inches or one-third of the stump diameter of the ground, whichever is higher, measured on the side adjacent to the highest ground. For timber sales, stump heights will meet the requirements of the Timber Sale contract.

201.04 Clearing.

Delete subsection (d) and replace with the following:

(d) Do not cut vegetation less than 3 feet tall and less than 3 inches in diameter, that is within the clearing limits but beyond the roadway and not in a decking area, and that does not interfere with sight distance along the road.

Add the following:

(e) Trim branches of remaining trees or shrubs to give a clear height of 14 feet above the roadbed unless otherwise indicated. Trim tree limbs as near flush with the trunk as practicable.

(f) Remove brush from log decks. Deck logs so that logs are piled parallel to one another; can be removed by standard log loading equipment; will not damage standing trees; will not interfere with drainage, and will not roll. Keep logs in log decks free of brush and soil.

301 - Untreated Aggregate Courses

301.00_nat_us_03_03_2005

301 Title Change.

Change the title to: **Section 301 Aggregate Courses**

301.01_nat_us_03_03_2005

301.01 Work.

Add the following:

Work includes producing aggregate by pit-run, grid rolling, screening, or crushing methods, or placing Government-furnished aggregate. Work may include additive mineral filler, or binder.

301.02_nat_us_05_16_2005

301.02 Material.

Add the following:

Bentonite	725.30
Calcium Chloride Flake	725.02
Lignon Sulfonate	725.20
Magnesium Chloride Brine or Calcium Chloride Liquid	725.02

301.03_nat_us_09_14_2005

301.03 General.

Add the following:

Written approval of the roadbed is required before placing aggregate.

For pit run or grid-rolled material, furnish material smaller than the maximum size. No gradation other than maximum size will be required for pit-run or grid-rolled material. For grid rolling, use all suitable material that can be reduced to maximum size. After processing on the road, remove all oversize material from the road and dispose of it as directed by the CO.

Provide additives or binder, if required, at the proportions specified.

Develop and use Government furnished sources according to Section 105.

If the aggregate is produced and stockpiled before placement, handle and stockpiled according to Section 320. Establish stockpile sites at locations approved. Clear and grub stockpile sites according to Section 201.

301.04_nat_us_03_03_2005

301.04 Mixing and Spreading.

Delete the first sentence of the first paragraph and add the following:

Ensure that aggregate and any required additives, water, mineral filler, and binder are mixed by the specified method except, if crushed aggregate products are being produced and mineral filler, binder, or additives are required, uniformly blend following crushing. Control additive proportions to 0.5 percent dry weight.

(a) Stationary Plant Method. Mix the aggregate with other required materials in an approved mixer. Add water during the mixing operation in the amount necessary to provide the moisture content for compacting to the specified density. After mixing, transport the aggregate to the

jobsite while it contains the proper moisture content, and place it on the roadbed or base course using an aggregate spreader.

(b) Travel Plant Method. After placing the aggregate for each layer with an aggregate spreader or windrow-sizing device, uniformly mix it with other required materials using a traveling mixing plant. During mixing, add water to provide the necessary moisture content for compacting.

(c) Road Mix Method. After placing the aggregate for each layer, mix it with other required materials at the required moisture content until the mixture is uniform throughout. Mix aggregate, water, and all other materials until a uniform distribution is obtained.

Spread the aggregate in a uniform layer, with no segregation of size, and to a loose depth that will provide the required compacted thickness.

When placing aggregate over geotextile, place aggregate in a single lift to the full depth specified.

Route and distribute hauling and leveling equipment over the width and length of each layer.

301.05_nat_us_10_14_2011

301.05 Compacting

Delete and replace with the following:

Compact each layer full width. Roll from the sides to the center, parallel to the centerline of the road. Along curbs, headers, walls, and all places not accessible to the roller, compact the material with approved tampers or compactors.

Compact the aggregate using one of the following methods as specified:

Compaction A. Operate spreading and hauling equipment over the full width of the travelway.

Compaction B. Operate rollers and compact as specified in Subsection 204.11(a)(1).

Compaction C. Moisten or dry the aggregate to a uniform moisture content between 5 and 7 percent based on total dry weight of the mixture. Operate rollers and compact as specified in Subsection 204.11(a)(1).

Compaction D. Compact to a density of at least 95 percent of the maximum density, as determined by AASHTO T 99, method C or D.

Compaction E. Removed.

Compaction F. Compact to a density of at least 95 per-cent of the maximum density, as determined by AASHTO T 180, method C or D.

Compaction G. Removed.

For all compaction methods, blade the surface of each layer during the compaction operations to remove irregularities and produce a smooth, even surface. When a density requirement is specified, determine the in place density and moisture content according to AASHTO T 310 or other approved test procedures.

301.06_nat_us_03_03_2005

301.06 Surface Tolerance.

Add the following:

Thickness and Width requirements:
The maximum variation from the compacted specified thickness is ½ inch. The compacted thickness is not consistently above or below the specified thickness and the average thickness of 4 random measurements for any ½ mile of road segment is within + ¼ inch of the specified thickness.
The maximum variation from the specified width will not exceed +12 inches at any point. The compacted width is not consistently above the specified width and the average of any four random measurements along any ½ mile of road segment is within +4 inches of the specified width.

303 - Road Reconditioning

303.01_nat_us_03_02_2005

303.01 Work.

Delete and add the following:
This work consists of reconditioning ditches, wingditches, shoulders, roadbeds, cattleguards, asphalt surfaces, and aggregate surfaces. Construct outslopes, clean and maintain all roadbed drainage structures when shown on the plans.

303.06_nat_us_08_05_2008

303.06 Aggregate Surface Reconditioning.

Delete and replace with the following:
303.06 Asphalt and Aggregate Surface Reconditioning.

Repair soft and unstable areas to the full depth of the aggregate surface and according to Subsection 204.07. Scarify to the depth of the aggregate surface or to a depth of 6 inches, whichever is less, and remove surface irregularities. Reshape, finish, and compact the entire aggregate surface according to Subsection 301.05, Subsection 321.05, or Subsection 322.05 as applicable.

For asphalt surfaces, clean the existing surface of all loose material, dirt, or other deleterious substances by approved methods. Remove and dispose of unsuitable material that shows evidence of distress, excess asphalt material, or settlement in the roadbed. Patch the areas with approved material that conforms to and is compatible with the adjacent pavement structure. Perform the patch work according to Section 301, 404, 430, or other sections as applicable for the layer or courses being repaired. Clean and seal cracks in the existing asphalt surface according to Subsection 414.05. Correct surface irregularities exceeding 6 inches in depth with a specified aggregate. Place and compact the aggregate according to Subsections 301.04 and 301.05. Prelevel other dips, depressions, sags, excessive or nonexistent crown, or other surface irregularities with asphalt concrete according to Section 404. Spread and compact the asphalt concrete in layers parallel to the grade line not to exceed 2 inches in compacted depth.

625 - Turf Establishment

625.01_0803_us_07_12_2006

625.05 Fertilizing

(a) Dry method or (b) Hydraulic method

Add the following:

Fertilizer shall be uniformly applied at the rate of 1000 lbs. per acre and shall have a chemical analysis of 10% Nitrogen, 10% Phosphorus, and 10% Potassium.

625.07 Seeding

Add the following

The Clover shall be inoculated.

Seed shall be applied at the rates for both of the Methods for the seeding periods as follows:

Seed Mix for Long Term Erosion Control

Seeding depth: <1/4"

If concerned about soil productivity, check pH and adjust with lime if necessary.

Also seed road bed on FS-310.

625.08 Mulching

Delete the last two sentences in the first paragraph

Add the following

Mulch shall be hay/straw applied at 80% coverage.

Add Table 625-1 Seeding Mixtures

Fall Plantings		**Planting Date**			
Recommended Planting[1]	Seeding Rate[2] (lb/acre)	Mountains	Fertilizer (lb/acre)	Wildlife Value	Remarks
Ladino Clover[3] Red Clover Ryegrass Rye Wheat	5 10 15 30 30	August 1 to October 15	500 10-10-10	Excellent	Well drained clayey or loamy soils. Perennial clover can persist for several years. Inoculate clover seed. Maintaining pH above 6.0 is critical.
Crimson Clover Hairy Vetch Wheat	15 15 60	September 1 to October 15	500 10-10-10	Excellent	Well drained clayey or loamy soils. Inoculate clover. Tolerates lower soil pH. Disk lightly in September to encourage re-seeding and overseed with wheat.
Arrowleaf Clover or Crimson Clover Ryegrass Wheat	15 15 40	September 1 to October 15	500 10-10-10	Good	Well drained sandy or loamy soils. Inoculate clover. Disk lightly in September to encourage re-seeding of clover and overseed with wheat and rye.
Wheat or Rye Unhulled Bermuda in sandy soil or Fescue in clayey soil	50 10 25	September 1 to November 15	500 10-10-10	Poor	Cool season annuals provide value for wildlife during fall and winter of first year. Maintain by mowing for weed control and fall fertilization.
Spring Planting		**Planting Date**			
Recommended Planting	Seeding Rate (lb/acre)	Mountains	Fertilizer (lb/acre)	Wildlife Value	Remarks
Ryegrass Kobe Lespedeza	2030	March 1 to April 15	500 10-10-10	Excellent	Low maintenance, reseeding annuals. Inoculate Kobe Lespedeza.
Bahiagrass Brown Top Millet	25 25	XXXXX	500 10-10-10	Good	Include hulled Bermuda at a rate of 10 lb. per acre on sandy sites. Kobe Lespedeza can be added at 10 lb. per acre to increase wildlife value.
Bermuda Grass Brown Top Millet	10 25	April 15 to July 1	500 10-10-10	Fair	Does well in dry, sandy sites.

Footnotes for Erosion Control Plantings Table

1. To maximize wildlife value, avoid plantings with Fescue, weeping love grass, Bermuda grass, and sericea Lespedeza.
2. Seeding depths should be ¼ inch unless otherwise noted.
3. Foe mixtures including Ladino clover, lime at the rate by soil test or at the rate of 2 tons per acre.

635 - Temporary Traffic Control

635.03_nat_us_05_13_2004

635.03 General.

Add the following:

Install temporary traffic control signs to temporary posts or approved temporary sign mounts.

703 - Aggregate

703.05_nat_us_08_14_2009

Delete 703.05 and replace with the following:

703.05 Subbase, Base, Surface Course, and Screened Aggregate.

(a) Subbase or base aggregate. Furnish hard, durable particles or fragments of crushed stone, crushed slag, or crushed gravel conforming the following:

(1) Gradation	Table 703-2
(2) Liquid limit, AASHTO T 89	25 max.
(3) Plastic limit, AASHTO T 90	Nonplastic
(4) Los Angeles abrasion, AASHTO T 96	40% max.
(5) Sodium sulfate soundness loss (5 cycles), AASHTO T 104	12% max.
(6) Durability index (coarse), AASHTO T 210	35 min.
(7) Durability index (fine), AASHTO T 210	35 min.
(8) Fractured faces, ASTM D 5821	50% min.
(9) Free from organic matter and lumps or balls of clay	

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary. Fine aggregate, material passing the No. 4 sieve, shall consist of natural or crushed sand and fine mineral particles.

(b) Surface course aggregate. Furnish hard, durable particles or fragments of crushed stone, crushed slag, or crushed gravel conforming the following:

(1) Gradation	Table 703-3
(2) Liquid limit, AASHTO T 89	35 max.
(3) Plastic Index, AASHTO T 90	
a) If the percent passing the No. 200 sieve is less than 12%	2 to 9
b) If the percent passing the No. 200 sieve is greater than 12%	Less than 2
(4) Los Angeles abrasion, AASHTO T 96	40% max.
(5) Sodium sulfate soundness loss (5 cycles), AASHTO T 104	12% max.
(6) Durability index (coarse), AASHTO T 210	35 min.
(7) Durability index (fine), AASHTO T 210	35 min.
(8) Fractured faces, ASTM D 5821	75% min.

(9) Free from organic matter and lumps or balls of clay

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Do not furnish material that contains asbestos fibers.

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary. Fine aggregate, material passing the No. 4 sieve, shall consist of natural or crushed sand and fine mineral particles.

(c) Screened aggregate – Furnish hard, durable particles or fragments of stone, slag, or gravel conforming the following:

(1) Gradation	Table 703-16
(2) Plastic Index, AASHTO T 90	Less than 9
(3) Los Angeles abrasion, AASHTO T 96	55% max.
(4) Free from organic matter and lumps or balls of clay.	

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary.

3. QUALITY CONTROL AND ASSURANCE

This section sets forth the procedures, guidelines and coordination between Forest Service and Partner that will be used in evaluating the performance of the Partner's sub-contractor for completing road reconstruction work.

Representatives

Section IV.A - Project Contacts of this Agreement identifies the individual designated as Contracting Officer Representative and Inspector (if assigned) with responsibility of inspecting, monitoring and assessing work performance of the Partner's sub-contractor.

Partner shall, prior to start of project work, designate in writing a qualified representative to inspect sub-contractor performance as described in the Quality Control Plan contained in Appendix B.

Quality Control

The Partner shall prepare, as part of the Technical Proposal (Appendix B), a Quality Control Plan for project work. This Plan should demonstrate how the Partner – through organization, supervision, and self-inspection – will maintain work performance of its sub-contractor at the Acceptable Quality Level. Such plan should contain an inspection system, detailing inspection frequency, types of data to be collected for monitoring performance, and methods for identifying and preventing defects in the quality of work performed.

Acceptable Quality Level

Performance Objective and Standard	Acceptable Quality Level	Method Of Assessment
Road Reconstruction	Reconstruction meets provided specifications (and quantities)	Partner's records, notes; Forest Service inspections, records, reports; gravel load tickets

Quality Assurance

The Forest Service will monitor progress to ensure that the Partner/sub-contractor is providing the quality promised in their Quality Control Plan and that work meets performance standards. The Partner will be responsible for providing Forest Service with documentation that gravel has been placed at locations designated by Forest Service in amounts specified in Schedule of Items by providing gravel load tickets. Work cannot be accepted without such documentation.

Forest Service inspections will be documented on Daily Diaries and placed in the contract file. If work does not meet the Acceptable Quality Level given above, a Notice of Non-Compliance will be issued by the COR. The COR may issue other cure notices if work is not being performed in a timely manner or does not comply with contract specifications.

Acceptance of Work

Upon Partner's written request and assurance that work has been completed, Forest Service shall perform an inspection within 5 days, excluding weekends and Federal holidays, so as not to delay unnecessarily the progress of Partner's Operations. Such request may be for acceptance of any reasonable portion of a Specified Road listed in the Schedule of Items.

Specified Road work may be accepted subject to completion of clearing work that does not affect the road structure when completion is delayed for reasons beyond control of Partner, such as adverse weather.

Specified Road work may be accepted subject to completion of planting and seeding for soil stabilization when completion is delayed for reasons beyond control of Partner, such as seasonal limitations. Partner shall complete planting or seeding on such road during the next suitable planting season.

Prior to request for final inspection, Specified Road work, roadways, borrow pits, and quarries, occupied and no longer needed by Partner in connection with Partner's Operations, shall be cleared of all rubbish, excess materials, and temporary structures.